

Ohio Academy of Science
91st Annual Meeting
The Ohio State University
April 23-24-25, 1982

Guide to the 57th Annual Field Conference of the Section of Geology
April 25, 1982

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Continental Glaciation and associated features, in Fairfield County, Ohio

[Information for title page taken from Ohio Journal of Science, v. 82, no. 2, p. vi-vii.]

Continental Glaciation and associated
features, in Fairfield County, Ohio

- STOP Till plain, southeast of Columbus, and south of Canal Winchester
Canal Winchester moraine, Late Wisconsin in age
- STOP via Lockville Sta., to old canal town of Lockville (short lock stop)
- STOP Hummel Road kames, along north edge of Johnstown moraine, Late Wisconsin
Kame gravel - size, shape, sorting, stratification
stonecounts = lithology of the pebbles; soil on gravel, possible till
- Drive south up onto Johnstown moraine, turn eastward, between bedrock hills
on south (right) and Carroll Kames on north (left)
- STOP Carroll Outwash, its beginning, as it starts down Hocking Valley
kame gravel changing into outwash, at the terminal moraine position
- Drive south and east of Carroll, on Johnstown moraine, Late Wisconsin
Early Wisconsin ground moraine on right (south), to Lancaster
through bedrock hill of sandstone (Scenic Route)
- STOP Rock of Ages "quarry" in sandstone; Early Wisconsin till gone
- Drive around north edge of Lancaster - Lancaster terrace, under Lancaster
Early Wisconsin terminal moraine position at Lancaster
Lancaster terrace outwash gravel also goes down Hocking River valley
- STOP Berger Boy(?), by Baldwin Run, valley eroded into Lancaster outwash
- Drive southeast of Anchor-Hocking Glass, into mouth of old Teays Valley
- STOP Lake sediments, Early Wisconsin outwash in mouth of old Teays Valley
Silts, organic layer, clays, wood fragments
- Drive eastward, up Teays Valley, along south edge, Illinoian kame terraces
- STOP Illinoian Kame Terrace, southwest of North Berne, walk in to pit from road
Kame Terrace gravel - size, shape, sorting, stratification
stonecounts, origin of sediment within the gravel, soil on gravel
- Drive eastward, along lake bottom, several stops possible, toward Bremen
- STOP Lake sediment in bay on north edge of lake (Schlister Farm)
Problem - origin of bones in lake silts
- Drive back to Lancaster over loess-covered hills, end of trip
return to Columbus

STONE COUNTS FROM GRAVELS, HOCKING VALLEY, OHIO

(Always in %, and recorded as: Calcareous, Clastics, Crystallines)

Kame Gravels, 1.5 to 2 miles northwest of Carroll, Fairfield County, Ohio

All these gravels are at the head of the Carroll outwash, starting at Carroll as kames, and becoming outwash to the south down Hocking Valley.

65	24	9	-	1951-52, John Kempton, MS thesis, ca. 300 pebbles
49	36	15	-	1960, Geomorphology class - 12 teams
53	32	14	-	1961 " " - 5 teams
58	33	9	-	1962 " " - 7 teams
49	37	14	-	1963 " " - 3 best teams
52	36	13	-	1964 " " - 9 teams
52	32	16	-	1967 " " - 5 best teams
54	32	14	-	1968 " " - 10 teams
\bar{x} 54	33	13	-	1951-1968 " " - ca. 5400 pebbles

Kame Gravel, few 100 ft. north of Supersweet Feeds Elevator, Carroll, Ohio

54	30	15	-	Apr 1969, Geomorphology class - 9 teams (kame or esker?)
54	27	19	-	Nov 1969 " " - 5 best teams
\bar{x} 70	18	12	-	1969, Maddocks and Taylor, Senior thesis - 1200 pebbles
\bar{x} is over a 12 ft. vertical exposure of clean gravel				

Carroll outwash terrace remnants (Wol) down Hocking River valley to Chio River

\bar{x} 67	24	9	-	1959, Kempton and Goldthwait, Ohio Jour Sci. (no. pebbles ?)
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Lancaster outwash terrace remnants (Woh) down Hocking River valley to Chio River

\bar{x} 46	38	15	-	1959, Kempton and Goldthwait (no. pebbles ?)
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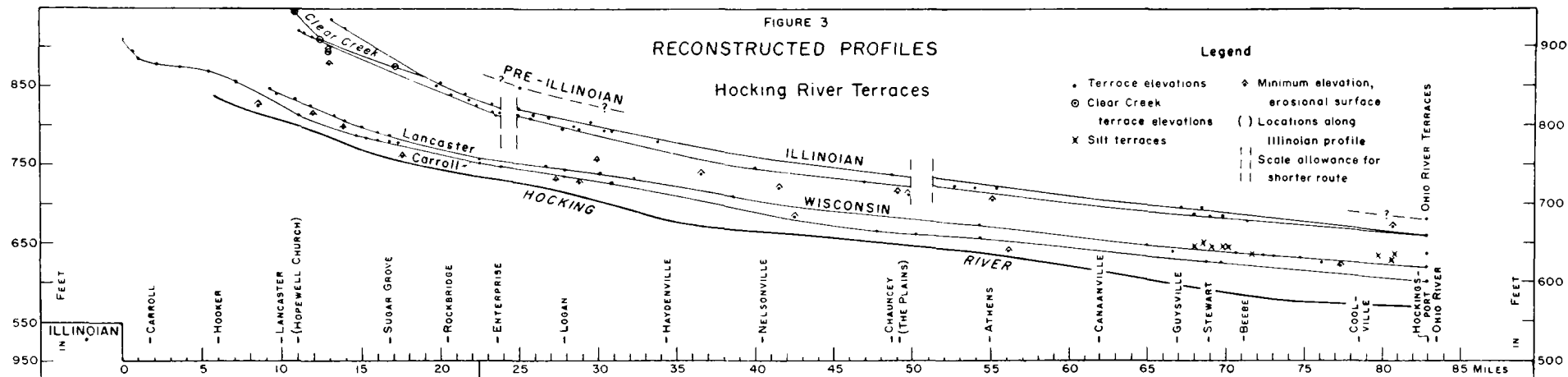
Illinoian outwash terrace remnants (Io) down Hocking River valley to Chio River

\bar{x} 37	39	24	-	1959, Kempton and Goldthwait - 9 terrace remnants = 900 pebbles
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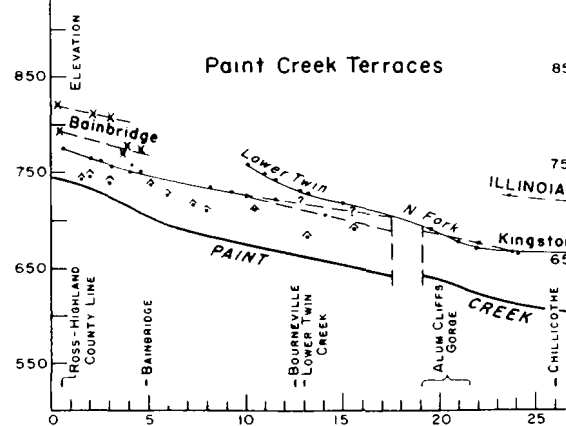
Illinoian outwash, Brewer's Gravel pit, 3.1 mis. south of Lancaster, west side val

\bar{x} 62	21	17	-	1971, Killius, Senior thesis - 1295 pebbles, at 13 places
Gravel pit, due east Brewer's pit, 3.2 mis. so. Lancaster				
\bar{x} 57	22	21	-	1971, Killius - 200 pebbles, at 2 places - east side of valley
Gravel pit, northeast of Brewer's pit, 3 mis. so. Lancaster				
\bar{x} 58	27	15	-	1971, Killius - 199 pebbles, at 2 places - east side of valley
Gravel pit, north of U.S. 33, 1.5 mi. east of Logan, Perry Co.				
\bar{x} 48	27	23	-	1971, Killius - 200 pebbles, at 2 places - east side of valley

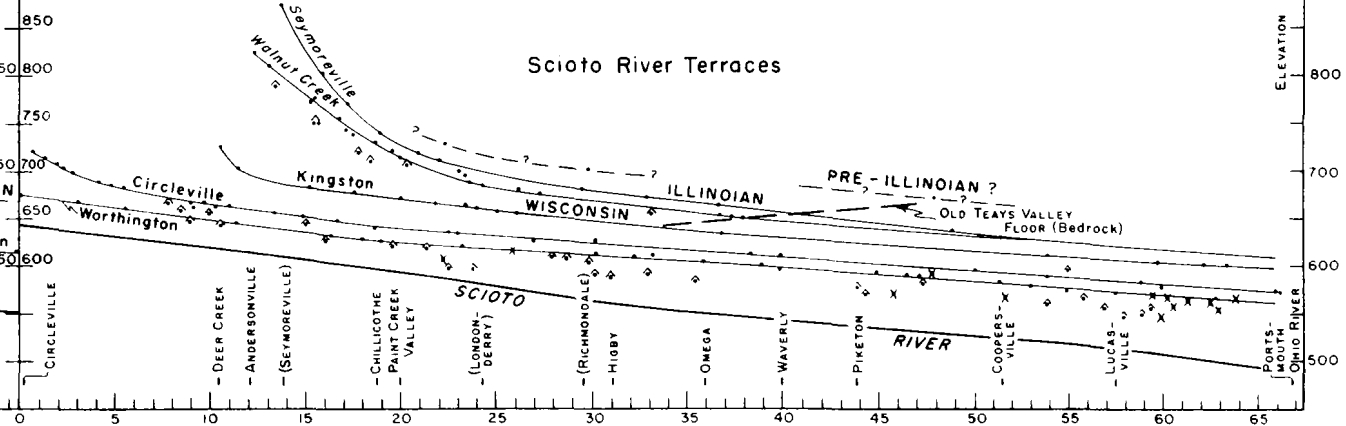
FIGURE 3
RECONSTRUCTED PROFILES
Hocking River Terraces

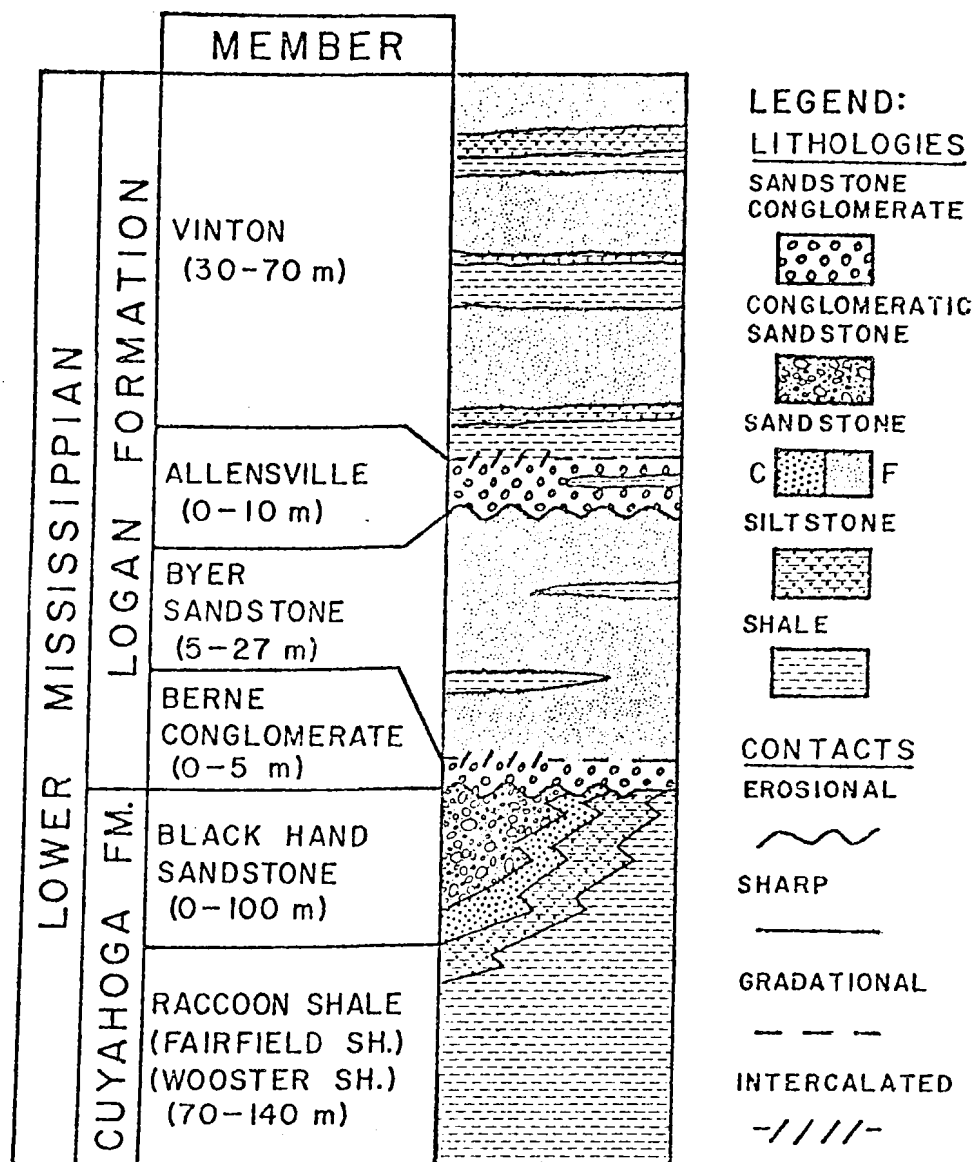


Paint Creek Terraces



Scioto River Terraces





From: Bork, K. B., and Malcuit, R. J. 1979, Paleoenvironments of the Cuyahoga and Logan Formations (Mississippian) of central Ohio: Geol. Soc. Amer. Bulletin, vol. 90, no. 12 (Dec.), pt. I, p. 1091-1094, pt. II, p. 1782-1838.